DETAILED ACTION

This Application is in response to a communication made on September 16, 2008.

Claims 11 and 33 have been amended.

Claims 1-10, 20-32, and 36 have been cancelled.

Claim 44 has been newly added.

Claims 11-19, 33-34, and 37-43 are pending in this application.

Affidavit

The affidavit filed September 16, 2008 has been considered and is persuasive regarding the NPL reference Mukherjee et al. (Structured Scalable Meta-formats (SSM) version 1.0 for content agnostic Digital Item Adaptation). *See* MPEP §715.01(a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11-19 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra (5953506) in view of Mukherjee et al. (Proposals for end-to-end Digital Item Adaptation using Structured Scalable Meta-Formats(SSM)) (Located in IDS filed March 8, 2004).

Regarding claims 11, 33, and 34, Kalra teaches a machine-implemented method, comprising:

receiving a scalable encoded bitstream comprising scalable encoded media data and values of non-media-type-specific scalability attributes corresponding to different adaption points of the scalable encoded media data (Column 18, lines 47 – 63);

obtaining receiving attributes for a destination of an outbound version of the scalable encoded bistream, wherein ones of the receiving attributes defined explicit constraints on the outbound version of the scalable encoded bitstream (Col. 15, line 45 – Col. 16, line 20);

determining values of adaptation measure from respective evaluations based on the values of the attribute variables (Col. 15, lines 1 – 14);

ascertaining a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values the adaptation measures (Col. 16, lines 49 – 58);

selecting an adaptation point from the set of candidate adaption without regard to the scalable encoded media data, (Column 15, lines 51 – 54; Column 16, lines 20 – 24; lines 37-42; lines 53 – 58); and

transcoding the scalable bitstream in accordance with the selected adaptation point to produce the outbound version of the scalable encoded bitstream (Column 16, line 49 – Column 17, lines 8; Column 3, line 66 – Column 4, line 6).

Kalra does not explicitly indicate that the constraints are determined based on functions.

Mukherjee teaches that transcoders should scale media based on metadata descriptions and outbound constraints received on a per-media-stream bases, wherein the transcoder performs no actual determination about the actual contents of the bitstream format (Page 7-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the constraints be programmed by the media stream creator to allow a wide variety of stream formats to be processed by the transcoders.

Regarding claim 12, Kalra teaches the method of claim 11, wherein the determining comprises determining the value of at least one of the adaptation measures based at least in part on a multivariate function defined by a respective one of the receiving attributes and comprising a linear combination of products of univariate functions of ones of the scalability attribute variables (Column 17, lines 15 – 55).

Regarding claim 13, Kalra teaches the method of claim 12, wherein the ascertaining comprises comparing the at least one adaptation measure to at least one constraint function defined by a respective one of the receiving attributes (Column 16, lines 53 - 61).

Regarding claim 14, Kalra teaches the method of claim 11, wherein the ascertaining comprises comparing ones of the adaptation measures to ones of the receiving attributes limit constraints ascertaining (Column 16, lines 37 – 42; lines 53 - 61).

Regarding claim 15, Kalra teaches the method of claim 11, wherein the receiving attributes specified comprise optimization constraints ascertaining (Column 17, lines 15 – 55).

Regarding claim 16, Kalra teaches the method of claim 13, wherein the products comprise product terms and the determining comprises evaluating the multivariate function based on ones of the receiving attributes specifying at least one of:

a number of product terms in the linear combination; a number of elements in each product term; attribute codes for attributes in each product term; function codes for the univariate functions of the attribute values; and multipliers for the linear combination (Column 17, lines 15 – 55).

Regarding claim 17, Kalra teaches the method of claim 14, wherein the selecting comprises comparing ones of the adaptation measures to ones of the limit constraints specifying for at least one of one of the adaptation measures at least one of a maximum values and a minimum values supportable by the receiving destination (Column 15, lines 51 – 65).

Regarding claim 18, Kalra teaches the method of claim 15, wherein the selecting comprises selecting the adaptation point in accordance with at least one of the optimization constraints specifying at least one of a maximization and a minimization of a respective one of the adaptation measures (Column 16, lines 2 – 17).

Regarding claim 19, Kalra teaches the method of claim 11, wherein the selecting comprises determining at least one of the adaptation measures based at least

in part on an evaluation of a stack function comprising operations, and variables corresponding to ones of the scalability attributes (Column 17, lines 15 – 55).

Regarding claim 37, Kalra teaches the method of claim 11.

Kalra does not explicitly indicate wherein the scalable encoded bitstream additionally comprises description metadata specifying a hierarchical model of the bitstream, and the transcoding further comprises adapting the description metadata to represent the structure of the outbound version of the scalable encoded bitstream.

Mukherjee teaches wherein the scalable encoded bitstream additionally comprises description metadata specifying a hierarchical model of the bitstream, and the transcoding further comprises adapting the description metadata to represent the structure of the outbound version of the scalable encoded bitstream (Page 17 – 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the constraints be programmed by the media stream creator to allow a wide variety of stream formats to be processed by the transcoders.

Regarding claim 38, Kalra teaches the method of claim 11.

Kalra does not explicitly indicate wherein the scalable encoded bitstream specifies combination variables in terms of respective ordered lists of ones of numeric constants, variables, arguments, and operators; and further comprising evaluating each of the combination variables, wherein the evaluating comprising pushing the respective ordered list onto a respective expression stack.

Mukherjee teaches wherein the scalable encoded bitstream specifies combination variables in terms of respective ordered lists of ones of numeric constants, variables, arguments, and operators; and further comprising evaluating each of the combination variables, wherein the evaluating comprising pushing the respective ordered list onto a respective expression stack (Page 17 – 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the constraints be programmed by the media stream creator to allow a wide variety of stream formats to be processed by the transcoders.

Regarding claim 39, Kalra teaches the method of claim 38.

Kalra does not explicitly indicate wherein the pushing comprises pushing each constant into the respective expression stack, and the pushing of each constant comprises pushing a real numeric element corresponding to the constant into the respective expression stack.

Mukherjee teaches wherein the pushing comprises pushing each constant into the respective expression stack, and the pushing of each constant comprises pushing a real numeric element corresponding to the constant into the respective expression stack (Page 17 – 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the constraints be programmed by the media stream creator to allow a wide variety of stream formats to be processed by the transcoders.

Regarding claim 40, Kalra teaches the method of claim 38.

Kalra does not explicitly indicate wherein the pushing comprises pushing each variable into the respective expression stack, and the pushing of each variable comprises determining a numeric value of the variable for a set of adaptation points and pushing the determining numeric value into the respective expression stack.

Mukherjee wherein the pushing comprises pushing each variable into the respective expression stack, and the pushing of each variable comprises determining a numeric value of the variable for a set of adaptation points and pushing the determining numeric value into the respective expression stack (Page 17 – 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the constraints be programmed by the media stream creator to allow a wide variety of stream formats to be processed by the transcoders.

Regarding claim 41, Kalra teaches the method of claim 38.

Kalra does not explicitly indicate wherein the pushing comprises pushing one or more unary operators into the respective expression stack, and in response to pushing each unary operator into the respective expression stack, popping the unary operator and a successive top numeric stack element out of the respective expression stack, determining a result from the popped unary operator and numeric stack element, and pushing the result into the respective expression stack.

Mukherjee teaches indicate wherein the pushing comprises pushing one or more unary operators into the respective expression stack, and in response to pushing each unary operator into the respective expression stack, popping the unary operator and a successive top numeric stack element out of the respective expression stack,

determining a result from the popped unary operator and numeric stack element, and pushing the result into the respective expression stack (Page 17 – 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the constraints be programmed by the media stream creator to allow a wide variety of stream formats to be processed by the transcoders.

Regarding claim 42, Kalra teaches the method of claim 38.

Kalra teaches wherein the pushing comprises pushing one or more binary operators in the respective expression stack, and in response to pushing each binary operator into the respective expression stack, popping the binary operator and two successive top numeric stack elements out of the respective expression stack, determining a result from the popped binary operator and the two numeric stack elements, and pushing the result into the respective expression stack.

Mukherjee teaches wherein the pushing comprises pushing one or more binary operators in the respective expression stack, and in response to pushing each binary operator into the respective expression stack, popping the binary operator and two successive top numeric stack elements out of the respective expression stack, determining a result from the popped binary operator and the two numeric stack elements, and pushing the result into the respective expression stack (Page 17 – 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the constraints be programmed by the media stream creator to allow a wide variety of stream formats to be processed by the transcoders.

Regarding claim 43, Kalra teaches the method of claim 38.

Kalra teaches further comprising calling each of the combination variables specifying a number of arguments, and in response to each calling of a respective one of the combination variables, serially popping the specified number of top elements from the respective expression stack, and determining a value of the combination variable from the popped elements.

Mukherjee teaches a method comprising calling each of the combination variables specifying a number of arguments, and in response to each calling of a respective one of the combination variables, serially popping the specified number of top elements from the respective expression stack, and determining a value of the combination variable from the popped elements (Page 17 – 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the constraints be programmed by the media stream creator to allow a wide variety of stream formats to be processed by the transcoders.

Regarding claim 44, Kaltra teaches the method of claim 11, wherein tile receiving comprises receiving the scalable encoded bitstream from at least one remote network node, the obtaining comprises receiving the receiving attributes from at least one remote network node, and the scalable encoded bitstream and the receiving attributes are received from different from respective network nodes (Col. 15, line 45 – Col. 16, line 20, the attributes are received from the client).

Response to Arguments

Applicant's arguments with respect to claims 11 and 33 have been considered but are moot in view of the new ground(s) of rejection.

The new reference, Mukherjee titled Proposals for end-to-end Digital Item Adaptation using Structured Scalable Meta-Formats(SSM) has a publication date of October 2002, which is **more than one year before the effective filing date** of the claimed invention and contains the same relied upon material as the previously relied upon Mukherjee reference. A rule 1.132 affidavit would not overcome this reference because of the statutory bar.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571)272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin Bates/
Primary Examiner, Art Unit 2456